Application No. 09/990,754

AMENDMENT TO THE SPECIFICATION

Replace paragraph [0014] with the following amended paragraph:

[0014] As used herein, control logic 202 controls the scalability aspect of the network interface 200. In this regard, control logic 202 determines whether the interface 200 is coupled to an 802.3ae network or some legacy network (e.g., 1Gb/s, 100Mb/S, 10Mb/S). According to one example implementation, control logic 202 utilizes auto-negotiation features to identify the communication rate supported by the remote network device. Any of a number of auto-negotiation techniques may well be used by control logic 202 in this regard. In accordance with one aspect of the present invention, developed more fully below, once control logic 202 has identified the communication capability of the remote network device, control logic 202 enables select interface resources to establish a communication channel within the 10Gb/s signaling rate of the communication link 112 that is commensurate with the communication capability of the remote device. Although depicted as a separate functional entity for purposes of clarity, those skilled in the art will appreciate that at least this aspect of the control logic 202 may well be embodied within other physical or logical elements of interface ~~202~~ 200. In one implementation, for example, the auto-negotiation features of control logic 202 are implemented within a physical media interface, such as the 10G physical media interface (PMI) of 802.3ae compliant devices. In this regard, control logic 202 is intended to represent any of a wide variety of control logic known in the art such as, for example, microprocessor(s), microcontroller(s), programmable logic device(s) (PLD), field programmable gate arrays (FPGA), state machine(s) and the like. Alternatively, control logic 202 may well be content (e.g., executable instructions) which, when executed by a computing appliance, implement the control features described herein.

Replace paragraph [0015] with the following amended paragraph:

[0015] As depicted, switch 204 routes data to/from communicatively coupled system(s) through I/O buffer(s) 104. According to one aspect of the present invention, switch 204 routes such information to/from one or more of the 802.3ae compliant MAC 106 and/or one or more of the 1Gb/s MAC(s) 206. According to one example implementation, switch 204 receives control information from control logic (e.g., 202) to

route content between the I/O buffer(s) [[204]] 104 and the MAC(s) 106 and/or 206. In accordance with the illustrate example implementation, switch 204 is controlled via direct memory access (DMA) from control logic such as, e.g., control logic 202.

Replace paragraph [0016] with the following amended paragraph:

[0016] In accordance with one example implementation of the present invention, interface 200 is endowed with one or more 1Gb/s media access controller(s) (MAC) 206 to implement the dynamic channelization features of the present invention. That is, in accordance with one example implementation, network interface 200 includes one or more 1Gb/s MAC(s), which are selectively engaged to 1Gb/s establish up to a sub-10Gb/s data channel with a remote network device. In accordance with one example implementation, the sub-10Gb/s data channel is a virtual channel established within the 10Gb/s bandwidth of an 802.3ae communication link. In accordance with one example implementation, the sub-10Gb/s data channel is established over a sub-10Gb/s communication link (e.g., a conventional 1Gb/s Ethernet link). As shown, each of the 1Gb MACs 206 depicted are dual, 1Gb/s MACs, each with an input and an output. As used herein, such MAC(s) perform packetization and encoding functions to generate 802.3 compliant datagrams for transmission to the receiving network device.

Replace paragraph [0027] with the following amended paragraph:

[0027] In block 404, network interface ~~202~~ 200 selects an appropriate media access controller(s) 106 and/or 206, and/or MAC attribute(s) to enable communication with the remote network device. In accordance with the teachings of the present invention, control logic 202 identifies the communication capability of the remote network device and, if the remote network device supports the 10Gb/s data channel of the 802.3ae MAC, the 802.3ae MAC 106 is selected. If not, network interface 200 selectively invokes the dynamic channelization features of the present invention to facilitate communication with the legacy network device. A flow chart of an example method for implementing the dynamic channelization aspects of the present invention is detailed more fully below, with reference to Fig. 5.

Replace paragraph [0048] with the following amended paragraph:

[0048] In accordance with the teachings of the present invention, introduced above, scalable network interface 200 employs auto-negotiation feature(s) to identify the communication capability of remote network element [[824]] 822. In so doing, scalable network interface 200 identifies the communication capability of the legacy network interface 824 and selectively invokes one or more of dynamic channelization and/or rate pacing to establish a communication link 826 suited to the capability of the remote network device 822. In this regard, implementation [[822]] 820 graphically depicts the ability of scalable network interface 200 to establish a communication link with legacy devices.